

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>AKK-0066-PCT</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/JP2004/005839</b>	International filing date (day/month/year) <b>30.04.2004</b>	Priority date (day/month/year) <b>09.07.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>B41C1/18, B41C1/05</b>		
Applicant <b>ASAHI KASEI CHEMICALS CORPORATION</b>		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>7</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:             <ul style="list-style-type: none"> <li><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> </li> <li>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</li> </ul>
4.	This report contains indications relating to the following items: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the report</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input checked="" type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
    - ☐ international search (Rule 12.3 and 23.1(b))
    - ☐ publication of the international application (Rule 12.4)
    - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
  - ☒ the international application as originally filed/furnished
  - ☐ the description:
    - pages \_\_\_\_\_ as originally filed/furnished
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the claims:
    - nos. \_\_\_\_\_ as originally filed/furnished
    - nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the drawings:
    - sheets \_\_\_\_\_ as originally filed/furnished
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/005839

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-26	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-26	NO
Industrial applicability (IA)	Claims	1-26	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>Document 1: JP 2002-79645 A (Asahi Kasei Corp.), 19 March 2002</p> <p>Document 2: JP 60-21214 A (Rheon Automatic Machinery Co., Ltd.), 2 February 1985</p> <p>Document 3: JP 2001-179928 A (Asahi Kasei Corp.), 3 July 2001</p> <p>Document 4: JP 54-121805 A (Dainippon Printing Co., Ltd.), 21 September 1979</p>			
<p>Claims 1, 4 and 5, 7, 9, 12, 14, and 15</p> <p>The invention set forth in claims 1, 4 and 5, 7, 9, 12, 14, and 15 does not involve an inventive step in the light of documents 1 and 2 cited in the international search report.</p> <p>The inventions disclosed in document 1 and document 2 belong to closely related technical fields in that each displays a feature wherein a cylindrical body is coated with a fluid, and thus, a person skilled in the art could easily conceive of using the procedure wherein a resin in liquid form is supplied to upper portion of a piece being processed, and the tip of a blade on a resin-receiving plate is used to mold the supplied liquid resin to a</p>			

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

specified coating thickness on the outer circumference of the piece being processed, disclosed in document 2, in place of the coating procedure for supplying a photosensitive resin in liquid form, disclosed in document 1.

Here, the decision as to whether to supply the liquid resin to the resin-receiving plate or directly to the piece being processed is recognized as a feature fittingly determined at the discretion of a person skilled in the art, and moreover, no exceptional difference in working or effect is recognized as arising from that simple difference; therefore, supplying the liquid resin above the resin-receiving plate is nothing more than a simple design adaptation for a person skilled in the art.

Further, document 1 (paragraph [0027]) indicates that the ultraviolet rays in the exposure procedure have a wavelength in the 200 to 400 nm range, and the intensity of said ultraviolet rays and the viscosity of the liquid photosensitive resin are merely features fittingly determined by a person skilled in the art.

## Claims 2 and 3

The invention set forth in claims 2 and 3 does not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

Document 2 (page 2, lower left column, line 16 to lower right column, line 14) discloses a feature wherein the resin-receiving plate has a resin flow-preventing ridge and a feature wherein the surface of the cured resin layer is shaped, and no exceptional technical significance is recognized in simply making the resin

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flow-preventing ridge movable in the axial direction of a piece being processed.

## Claim 6

The invention set forth in claim 6 does not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

Document 2 (page 3, upper left column, lines 6 to 10) discloses a feature wherein a desired thickness of the liquid resin is applied to the outer circumference of a piece being processed as the gap between the tip of the blade on the resin receiving-plate and the outer circumference of the piece being processed is gradually widened.

## Claims 8, 10, and 11

The invention set forth in claims 8, 10, and 11 does not involve an inventive step in the light of document 1 and 2 cited in the international search report.

The removal of resin from an area not needed as a printing plate is merely a feature fittingly determined by a person skilled in the art.

## Claim 13

The invention set forth in claim 13 does not involve an inventive step in the light of documents 1, 2, and 3 cited in the international search report.

Document 3 (paragraph [0033]) discloses a latter exposure procedure wherein, after a cleaning procedure, ultraviolet rays are irradiated onto a relief image layer on the outer circumference of a piece being processed while said piece is rotated.

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Claims 16 and 17, claims 19 to 26

The invention set forth in claims 16 and 17 and claims 19 to 26 does not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

A person skilled in the art could easily conceive of using the resin supply mechanism equipped with a resin supply nozzle and the resin coating smoothing mechanism having a resin-receiving plate with a scalpel-shaped tip and positioned opposite a piece being processed, disclosed in document 2, in place of the photosensitive resin fluid supply mechanism disclosed in document 1.

Claim 18

The invention set forth in claim 18 does not involve an inventive step in the light of documents 1, 2, and 4 cited in the international search report.

Document 4 (page 4, lower right column, lines 15 to 18) discloses a feature wherein a holding block for a processing tool can be linearly moved in the axial direction of a piece being processed.

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## Box No. VI Certain documents cited

## 1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2003-241397 A	27.08.2003	22.02.2002	
[PX]			

## 2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
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